

Notice of Allowability

Application No.

10/810,431

Examiner

James F. Sugent

Applicant(s)

STRICKLAND, STEPHEN

Art Unit

2116

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to Amenment After Non-Final Fejection received March 23, 2007.
2. ☒ The allowed claim(s) is/are 3-5, 8-12, 16-26 (re-numbered as 1-19).
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some* c) ☐ None of the:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☒ Information Disclosure Statements (PTO/SB/08),
Paper No./Mail Date 3/23/2007
4. ☐ Examiner's Comment Regarding Requirement for Deposit
of Biological Material
5. ☐ Notice of Informal Patent Application
6. ☒ Interview Summary (PTO-413),
Paper No./Mail Date 6/1/2007.
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____.

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EXAMINER'S AMENDMENT

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Amended line 1 of claim 25 from:

"A packaged microcontroller as in claim 6 wherein..."

to,

"A packaged microcontroller as in claim 8 wherein..."

Authorization for this examiner's amendment was given in a telephone interview with M. Ari Behar (Reg. No. 58,203) on June 1, 2007.

DETAILED ACTION

This Office Action is sent in response to Applicant's Communication received March 23, 2007 for application number 10/810,431 originally filed March 26, 2004. The Office hereby acknowledges receipt of the following and placed of record in file: Information Disclosure Sheet and amended claims 1-26 presented for examination.

Information Disclosure Statement

The Examiner would like to respectfully apologize for overlooking the handling of the IDS previously submitted July 24, 2006.

The Information Disclosure Statement (IDS) submitted on March 23, 2007 was placed of record in file. The submission is in compliance with the provisions of 37 CFR 1.97. Accordingly, the Information Disclosure Statement is being considered by the Examiner.

Allowable Subject Matter

Claims 3-5, 8-12, 16-26 are allowed.

The following is an examiner's statement of reasons for allowance for independent claim 3: Tomlinson teaches a data storage system, comprising: power circuitry configured to provide power signals; storage processing circuitry configured to perform data storage operations; and a packaged microcontroller coupled to the power circuitry and the storage processing circuitry, the packaged microcontroller having a set of input lines, a set of output lines, and control circuitry coupled to the set of input lines and the set of output lines, the control circuitry being configured to: receive, on the set of input lines, a first set of power signals which is provided by the power circuitry to the storage processing circuitry, and output, through the set of output lines, a set of enable signals to the power circuitry, the set of enable signals directing the power circuitry to provide a second set of power signals to the storage processing circuitry (Figs. 1, 2 and 7; column 1, lines 11-25 and column 12, lines 24-35 and column 4, lines 28-53 and column 5, lines 21-39 and column 3, line 66 thru column 4, line 27 and column 4, line 54 thru column 5, line 20 and column 8, line 51 thru column 9, line 32). Furthermore, Dougherty teaches a controller waiting a predetermined time period in response to receipt of the first set of power signals on the set of input lines and outputting the enable signals after waiting the predetermined time period (column 3, lines 3-45 and column 10, lines 18-32). Neither Tomlinson nor Dougherty teach,

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either singularly or in combination, nor found in further Examiner Search, teach the storage system wherein packaged microcontroller further includes: memory which stores pre-loaded code having a version identifier, the control circuitry being configured to: compare the version identifier of the pre-loaded code with a version identifier of available new code; and, replace the pre-loaded code stored in the memory with the available new code when the version identifier of the available new code indicates that the available new code is newer than the pre-loaded code, and maintain the pre-loaded code within the memory when the version identifier of the available new code indicates that the available new code is not newer than the pre-loaded code.

Likewise, similar limitations are found in independent claims 8, 10, 16 and 18 and are also deemed allowable for the same reasons shown above.

As a result, dependent claims 4, 5, 9, 11, 12, 17 and 19-26 are therefore allowable based upon their dependence on above allowable independent claims.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

Any inquiry concerning this communication or earlier communications from the Examiner should be directed to James Sugent whose telephone number is (571) 272-5726. The Examiner can normally be reached on 8AM - 4PM.

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If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, Rehana Perveen can be reached on (571) 272-3676. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent

- 5 Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at (866) 217-9197 (toll-free). If you would
- 10 like assistance from a USPTO Customer Service Representative or access to the automated information system, call (800) 786-9199 (IN USA OR CANADA) or (571) 272-1000.

James F. Sugent
Patent Examiner, Art Unit 2116
June 1, 2007

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REHANA PERVEEN
SUPERVISORY PATENT EXAMINER
6/6/07